

## **EFFECTIVENESS OF BUDGET ABSORPTION IN THE MINISTRY OF AGRICULTURE (MAPPF) OF TIMOR LESTE**

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### **ABSTRACT**

The purpose of this study is to determine and analyse the effectiveness of program-based budget absorption in the Ministry of Agriculture of Timor-Leste, and to assist the Ministry's planning and finance division in providing baseline information for decision-making. This research can inform future budget allocations, provide empirical contributions to financial management theory, and serve as a reference for further research. This study used documentary data collection techniques, collected through the Ministry's financial reports for the 2018-2022 period. Data processing employed descriptive methods, while the effectiveness of program-based budget absorption was measured using the Mardiasomo formula (2007:129). The results of the study show that the effectiveness of program-based budget absorption in the Ministry of Agriculture in 2018 was assessed with an effectiveness level of 92.02% with the category "Very Effective", in 2019 the effectiveness level was 84.62% with the category "Effective", in 2020 the effectiveness level was 95.25% with the category "Very Effective", in 2021 the effectiveness level was 73.67% with the category "Quite Effective" and in 2022 the effectiveness level was 77.02% with the category "Quite Effective". Judging from the average effectiveness level for 5 years of around 84.51%, it is classified as "Quite Effective". It is assumed that the Ministry of Agriculture is very careful in budget planning and always refers to the legal basis for planning so that there are spending programs that are partially realized and several other programs are also not realized due to inadequate budget allocation and suboptimal realization so that they do not reach the expected target.

**KEYWORDS:** Effectiveness Program-Based Budget Absorption

### **I. INTRODUCTION**

In response to economic changes, Timor-Leste has launched significant reforms to its budgeting system by adopting Program-Based Budgeting (PBP) instead of Activity-Based or Item-Based Budgeting. PBP emphasizes desired outcomes, with the primary goal of improving spending efficiency and optimally allocating funds to achieve the established national development vision.

These reforms were not implemented in isolation; they were supported by various international donors, including the World Bank and other donor agencies. This support was crucial in strengthening the capacity for budget planning, implementation, and oversight, which are key to achieving greater fiscal discipline and transparency. Through the PBP system, the government is expected to provide a clearer picture of budget utilization and its impact on achieving development targets. This is expected

to be a strategic step to ensure that every allocation of funds is measurable and provides tangible benefits to the community.

The regulations underlying these changes also include other measures, such as strengthening the capacity of the Fund Management Institution to ensure good governance. This will involve synergy between the government, the private sector, and civil society to create a more responsive and inclusive budget system.

Both central and regional governments have important responsibilities in governing, implementing development, and providing social services to the public. To carry out these tasks, adequate funding is required through the collection of various types of revenue from the public. This revenue is then used to finance government activities and provide services to the public.

An organization's budget plays a crucial role, as it is a systematic financial plan designed to support the implementation of an organization's programs and activities. As society demands transparency and public accountability, every government organization strives to improve and enhance its performance to be more oriented toward creating good public relations and good governance (Tamasoleng, 2015).

The expenditure of the State Budget (APBN) is very important for the government to answer the needs of the people of Timor Leste through the broad programs of the Ministry of Agriculture (Ministério Agrikultura) in line with the strategic development plan (PED) which is the core and productive infrastructure needed to build a modern and productive economy.

The benchmark for the success or failure of achieving organizational goals and how effectively its operations have run. Mardiasmo, (2017:134) explains that the budget is important for several reasons, namely: (1) The budget is a tool for the government to direct socio-economic development, ensure sustainability, and improve the quality of life of the community. And (2) The budget is needed because the needs and desires of the community are unlimited and continue to grow, while the available resources are limited. The budget is needed because of the problem of limited resources (scarcity of resources), choices, and trade-offs.

The budget is needed to ensure the government's accountability to its people (Mardiasmo (2009:63). In this case, the public budget is an instrument for implementing public accountability by existing public institutions. The government's goal is to develop a thriving market economy with a strong private sector, provide employment for the people, and ensure that all levels of society enjoy the benefits of developing Timor-Leste's natural resource wealth.

The government will focus on expanding and modernizing the agricultural sector, developing the rapidly growing tourism sector, increasing private sector activity, and revitalizing industry, including the growth and expansion of small and micro-enterprises. The public sector will also be a key driver of economic growth in the medium term and will lay the foundation for national progress through human

resource development and infrastructure program management. The government will develop public services that reflect the realities of Timor-Leste's society and promote economic growth and the creation of the best jobs.

Each user of a budget report has a different motivation for reading it. Government budget reports will be beneficial to many users if the information presented is understandable. Transparency and accountability. Information in government budget reports is not always clear and not everyone can understand it. However, users' interpretations of government budget reports will be a consideration in decision-making. Therefore, government budget analysis is needed as a tool to simplify the data presented in government budget reports to make them easier to understand for those who read and need government budget information. To help users of government budget reports understand and interpret budget reports, budget analysis is necessary. Budget analysis is intended to help understand budget reports, interpret budget figures, evaluate budget realization, and how to use budget information to achieve targets and measure performance.

Institutional performance assessments are not limited to nonprofit organizations, but also apply to for-profit organizations and individuals. They aim to determine the extent to which the government carries out its duties in governance, development, and public services by submitting quarterly, semi-annual, or annual budget reports. This serves as the basis for the Timor-Leste government's ability to manage its budget, as outlined in the *Orcamento Geral do Estado (OGE)*, which describes the government's ability to finance development activities.

Effectiveness and efficiency Good governance means that processes within an institution produce outputs that meet the needs of society while making optimal use of resources. The concept of efficiency in the context of good governance also includes the sustainable use of natural resources and environmental protection. (Accountability), Accountability is a key requirement of good governance, not only government institutions but also the private sector and civil society organizations must be accountable to the public and their institutional stakeholders. Who is accountable to whom varies depending on whether the decisions or actions taken are internal or external to the organization or institution. In general, organizations or institutions are accountable to those who will be affected by their decisions or actions. Accountability cannot be upheld without transparency and the rule of law. (Tamasoleng 2015)

The government currently faces various challenges in budget allocation, but Timor-Leste remains strongly committed to providing excellent public health services. This is evident in the Ministry of Agriculture's 2018-2022 State Budget (APBN) allocation, as shown in the table below.

Table 1

## Ministry of Agriculture Budget, 2018-2022

ITEM	2018		2019		2020		2021		2022	
	Budget	Total	Budget	Total	Budget	Total	Budget	Total	Budget	Total
Salary & Wages	\$ 3,555,118.00		\$ 3,656,527.00		\$ 3,521,098.00		\$ 4,327,225.00		\$ 5,094,380.00	
Goods & Services	\$ 3,266,372.00	\$7,015,896.00	\$ 9,563,605.00	\$14,709,250.00	\$ 3,517,547.00	\$7,265,087.00	\$ 13,861,436.00	\$28,834,588.20	\$ 12,236,761.00	\$27,583,959.00
Development Capital	\$ 194,406.00		\$ 891,229.00		\$ 109,997.00		\$ 1,661,100.00		\$ 2,205,120.00	
Minor Capital			\$ 597,889.00		\$ 116,445.00		\$ 7,759,827.20		\$ 4,093,448.00	
Transferências Públicas							\$ 1,225,000.00		\$ 3,954,250.00	

**Source: Ministerio Agrikultura 2025 Financial Report**

Based on Table 1, it can be seen that the State Budget (APBN) of the Ministry of Agriculture has fluctuated overall from 2018 to 2022. The State Budget (APBN) of the Ministry of Agriculture is allocated to finance expenditure budgets such as Salari e Vensimento/Salary and allowances, Bens e Serviços/Routine Budget, Capital Expenditure Budget, Public Transfer Funds, and Development Budget/Capital Desenvolvimento.

Based on the researcher's observations, the obstacles experienced so far by the Ministry of Agriculture have never been evaluated on the effectiveness of budget absorption allocated to the Ministry of Agriculture, so that the ministry itself cannot measure the performance of the financial section, as we know the level of effectiveness of budget absorption reflects that the Ministry of Agriculture has planned programs or activities in accordance with the Vision and Mission stated in the Strategic Plan that has been prepared and reflects the improvement of a country's economy, because an increase in the budget indicates that more work programs can be financed. The phenomenon of budget fluctuations between 2018 and 2022 in the Ministry of Agriculture of Timor Leste indicates challenges in budget allocation and realization. These fluctuations can be caused by various factors, including economic uncertainty, government policies, and less than optimal program implementation. Therefore, it is important to analyze the effectiveness of budget absorption in the agency to improve budget absorption and implementation in the future.

Research on the effectiveness of budget absorption has been widely conducted. Sumenge (2013), conducted a study with the title of budget in 2008, 2009, 2010, 2012 was said to be effective, but in 2011 the level of effectiveness was still lacking because the realization of the spending budget had a large difference with the spending budget target, this difference occurred because some budgeted activities were not implemented but for other activities that had been budgeted were effective, furthermore, Amaral (2015) conducted a study entitled "Budget Absorption Effectiveness in the Ministry of Public Works of Timor-Leste in 2009-2013." The study results showed that the average budget effectiveness in 2009-2013 was 89.29% with a percentage level of 80%-90%, or categorized as very effective.

Orleaes, Wiagustini and Soares (2019) conducted research entitled Analysis of the Effectiveness of Budget Absorption and the Growth Rate of the Revenue and Expenditure Budget of the Ministério De Saúde Timor-Leste for 2015-2019, the results of the research showed that the effectiveness of the ratio of the revenue and expenditure budget for 2015-2019 was generally effective with an absorption rate of 93%. However, there is a level of absorption that fluctuates every year with budget absorption below 50% and above 100% and analysis of program-based budget absorption at the program level is not included due to the lack of data obtained for this research. Furthermore, Epifani, Soares and Wia Agustin (2019) The growth ratio of the income and expenditure budget for 2015-2019 fluctuated in the range of quite successful to very successful or categorized as very successful because it was above 90 to >100%.

Based on the problems that have been described empirically, the findings of which include the conditions of the research location, this research examines the level of effectiveness of budget absorption at the Ministry of Agriculture.

### **Formulation of Problem**

Based on the background above, the problem in this research can be formulated as follows: how effective is the absorption of the spending budget at the Ministry of Agriculture?

### **Research purpose:**

The main objective of this study is to determine and analyze the effectiveness of budget absorption at the Ministry of Agriculture of Timor Leste.

### **Theoretical and practical benefits.**

The theoretical benefits of this research are expected to contribute to the science of financial management in the form of empirical research on the effectiveness of budget absorption and Practical benefits This study will contribute to promoting good budgeting practices by highlighting issues hindering the implementation of new budgeting systems and proposing reforms to address them. The research findings can inform change and raise awareness of reform efforts in other countries, which can provide valuable lessons for governments.

## **II. LITERATURE REVIEW**

### **A. Public Sector Budget**

According to Law No. 2/2022 concerning the State Budget and Public Financial Management (Enquadramento do Orçamento Geral do Estado e da Gestão Financeira Pública), a public budget is defined as the presentation of budget estimates for services and entities in the Administrative Public Sector, consisting of the Central Government budget and the budgets of Administrative Regions and Special Regions, prepared on an annual or multi-year basis.

According to Indra Bastian (2013:69), a public sector budget is defined as an activity plan represented in the form of revenue and expenditure plans in monetary units.

A budget is a detailed plan formally stated in quantitative terms to show how resources will be acquired and used over a specific period of time, generally one year (Supriyono, 2002). The activity of preparing a budget is called budgeting, while the use of a budget as a tool to control organizational activities is called budgetary control or control through a budget.

Budgeting is often equated with profit planning. Budgets can indicate potential financial problems in a company and can help control financial irregularities (Stewart, 1990). Budgets are a management tool for achieving goals. Therefore, budgets are not goals and cannot replace management. When preparing a budget, the following factors should be considered:

- 1) Knowledge of general government objectives and policies;
- 2) Past data;
- 3) Possible developments in economic conditions;
- 4) Knowledge of development tactics and strategies;
- 5) Possible changes in government policy;
- 6) Consideration of reserve funds to anticipate unforeseen circumstances (natural disasters, etc.)

Mardiasmo (2004; 62) (cited in Amaral 2015) defines "a public sector budget as an activity plan presented in the form of planned revenues and expenditures in monetary terms." He further explains the importance of a public sector budget because:

- 1) A budget is a government tool for directing socio-economic development, ensuring sustainability, and improving the quality of life for the community.
- 2) A budget is necessary because the needs and desires of the community are unlimited and constantly evolving, while available resources are limited. Budgets are created because of the problems of resource scarcity, choice, and trade-offs.
- 3) A budget is necessary to ensure that the government is accountable to the people.

### **B. Budget Absorption Effectiveness**

The definition of effectiveness, which generally refers to the level of achievement of results, or the effectiveness of the Timor-Leste government, is the planned level of program achievement against established targets. Simply put, effectiveness is the comparison between results and outputs. The definition of effectiveness is fundamentally related to the achievement of policy objectives or targets (utility outcomes). Effectiveness is the relationship between outputs and the intended goals or targets.

According to (Liang Gie, 2001), if someone carries out an action with a specific, truly desired goal, then that person is said to be effective if the action produces the desired result or objective. In other words, a result is considered effective if it is truly aligned with the plan, including applicable regulations. From several definitions of effectiveness, it can be concluded that effectiveness is the success or failure of outputs in meeting the desired goals or objectives.

Effectiveness is the relationship between outputs and the desired goals or objectives. Operational activities are said to be effective if the activity process achieves the ultimate goals and objectives of the policy (spending wisely). Effectiveness is the relationship between outputs and objectives. The greater the contribution of outputs to achieving goals, the more effective the organization, program, or activity is (Mahmudi, 2005).

Effectiveness is essentially related to the achievement of policy goals or objectives (utility outcomes). Ihyaul (2009: 26) defines effectiveness as the relationship between outputs and the desired goals or objectives. Operational activities are considered effective if the process achieves the policy's ultimate goals and objectives (prudent spending).

Furthermore, Soares (2025) states that the budget absorption rate is the portion of actual spending from budgeted expenditure. Budget absorption ensures the utilization and efficiency of regional resource implementation. A high absorption rate maximizes resources through effective budget implementation and utilization. Therefore, a well-planned and implemented budget will generate national economic growth. Government performance is measured by its ability to utilize the allocated budget. The ratio between actual spending and the target spending (budget) is the absorption rate. The higher the absorption rate, the higher the performance, and vice versa.

### **III. METHODOLOGY**

Based on the description of the conceptual framework explained above, this research is descriptive in nature, so its conceptual framework cannot be described descriptively but rather narratively. This research examines the effectiveness of budget absorption. Funding comes from the Timor-Leste State Budget (APBN). Therefore, the ministry will implement the allocated budget according to the activities of each program planned annually. Each budget item will be analyzed by comparing it to determine its effectiveness in relation to the expected results.

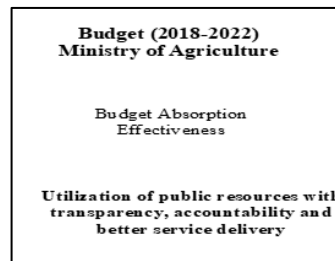


Figure 1. Framework of Thinking

### C. Research Method

The type of research used in this study is descriptive method, where all information is presented numerically and analyzed based on the effectiveness and efficiency ratios of the Timor-Leste Ministry of Agriculture's revenue and expenditure budget for the 2018-2022 fiscal years. This research was conducted at Ministry of Agriculture of Timor-Leste (Ministério Agrikultura).

This research was carried out in accordance with scientific expectations, and it is necessary to understand the various elements that form the basis of research. In this research, the variables to be measured are the effectiveness of budget absorption. Effectiveness is the level of achievement of program results with targets simply effectiveness is a comparison between the realization and target Mardiasmo (2007:129)

The data used in this study is based on secondary data collection. The Ministry of Agriculture's financial reports for the period 2018 to 2022 were collected from the Ministry of Finance website at [www.mof.gov.tl](http://www.mof.gov.tl), while the financial reports for the period 2018 to 2022 were collected directly from the Ministry of Agriculture's Finance Department.

This research is a quantitative descriptive study focuses on the effectiveness of absorption of expenditure, and the rate of growth of budget and expenditure of the Ministry of Agriculture Timor Leste.

#### 1) Effectiveness Ratio of Budget and Expenditure

The effectiveness of budget absorption is the realization of the Ministry of Agriculture Timor Leste expenditure compared with the targets established in 2018-2022 using the formula from Mardiasmo (2007:129)

$$\text{Effectiveness} = \frac{\text{Realization of Revenue and Expenditure}}{\text{Target Revenue and Expenditure}} \times 100\% \dots (1)$$

The Effectiveness Ratio is measured using the criteria for the level of budget effectiveness based on the criteria from Mahmudi (2016:141):

**Table 2. Effectiveness Criteria**

Percentage	Criteria
.....>100 %	Very Effective
90%-100%	Effective
80%-90%	Quite effective
60%-80%	Less Effective
.....< 60%	Not Effective

Sources: Mahmudi (2016:141)

#### IV. RESULTS

Result of the analysis - Effectiveness ratio of Ministry of Agriculture Expenditure for year 2018 to 2022. Based on the results of the calculation of effectiveness using the Mardiasomo formula (2004:4).

$$\begin{aligned} \text{Effectiveness ratio in 2018} &= \frac{\$7,743,507.00}{\$7,125,252.05} \times 100\% = 92.02\% \\ \text{Effectiveness ratio in 2019} &= \frac{\$14,709,250.00}{\$12,446,365.44} \times 100\% = 84.62\% \\ \text{Effectiveness ratio in 2020} &= \frac{\$7,637,970.00}{\$7,275,346.41} \times 100\% = 95.25\% \\ \text{Effectiveness ratio in 2021} &= \frac{\$28,834,588.20}{\$21,242,240.82} \times 100\% = 73.67\% \\ \text{Effectiveness ratio in 2022} &= \frac{\$28,083,959.00}{\$21,630,468.91} \times 100\% = 77.02\% \end{aligned}$$

Based on the results of the effectiveness calculations using the Mardiasomo formula (2004:4) and Mahmudi criteria (2015), the level of budget effectiveness at the Ministry of Agriculture is as in the following table.

**Table.1 Ministry of Agriculture Budget Effectiveness Timor-Leste, 2018-2022**

Year	Budget (US\$)	Actual expenditure (US\$)	Effectiveness (%)	Criteria
2018	\$ 7,743,507.00	\$ 7,125,252.05	92.02	Very Effective
2019	\$ 14,709,250.00	\$ 12,446,365.44	84.62	Effective
2020	\$ 7,637,970.00	\$ 7,275,346.41	95.25	Very Effective
2021	\$ 28,834,588.20	\$ 21,242,240.82	73.67	Quite Effective
2022	\$ 28,083,959.00	\$ 21,630,468.91	77.02	Quite Effective
<b>Five-Year Average Rate (average)</b>			84.51%	Effective

## V. DISCUSSION AND CONCLUSION

The five-year budget absorption from 2018 to 2022 compared to budget realization, as shown in Table 3, can be described as follows:

In the 2018 fiscal year, the Ministry of Agriculture received a budget allocation of \$7,743,507.00 and budget realization of \$7,125,252.05, with an effectiveness rate of 92.02%. It is concluded that budget absorption in 2018 is categorized as "Very Effective" using Mahmudi's (2015) criteria of "90%-100% Effectiveness." It is assumed that the Ministry of Agriculture is very meticulous in budget planning and consistently refers to the legal basis for planning, such as the Public Finance Law (Lei gestão finanças publica no. 13/2009) and based on the annual program planning written in the budget book, also known as the "livro orçamento 2-Plano Annual" in the 2018 fiscal year.

In the 2019 fiscal year, the Ministry of Agriculture received a budget allocation of \$14,709,250.00, and budget realization was \$12,446,365.44, with an absorption effectiveness rate of 84.62%. Based on the calculation formula of Mardiasomo (2004:4), it was concluded that the 2019 budget absorption was categorized as "Effective". This can be assumed that the Ministry of Agriculture is careful in budget planning and always refers to the legal basis for planning such as the Public Finance Law (Lei gestão finanças publica no.13/2009) and based on the annual program planning listed in the budget book or called "livro orçamento 2-Plano Annual" in the 2018 fiscal year of the Ministry of Agriculture.

In the 2020 fiscal year, the Ministry of Agriculture received a budget allocation of \$7,637,970.00 and budget realization of \$7,275,346.41 with an absorption effectiveness rate of 95.25%. This indicates that budget absorption in 2020 is categorized as "Very Effective". It can be assumed that the Ministry of Agriculture is very careful in budget planning and always refers to the legal basis for planning such as the Public Finance Law (Lei gestão finanças publica no.13/2009). Budget realization also depends heavily on the annual program planning contained in the budget book or what is called "livro orçamento 2-Plano Annual" in the 2018 fiscal year of the Ministry of Agriculture.

In the 2021 fiscal year, the Ministry of Agriculture received a budget allocation of \$ 28,834,588.20 and a budget realization of \$ 21,242,240.82 with an absorption effectiveness rate of 73.67%, it was concluded that budget absorption in 2021 was categorized as "quite effective." This can be assumed that the Ministry of Agriculture is quite careful in budget planning and always refers to the legal basis for planning such as public finance law (Lei gestão finanças publica no. 13/2009) and also in budget realization is also guided by the annual program planning written in the budget book or called "livro orçamento 2-Plano Annual" in the 2018 fiscal year of the Ministry of Agriculture.

In the 2022 fiscal year, the Ministry of Agriculture received a budget allocation of \$ 28,083,959.00, and the budget realization was \$ 21,630,468.91 with an absorption effectiveness rate of 77.02% using the Mardiasomo (2004:4) calculation formula, it was concluded that the budget absorption in 2022 was categorized as "quite Effective". It can be assumed that the Ministry of Agriculture is quite careful in budget planning but always refers to the legal basis for planning such as public finance law (Lei gestão finanças publica no.13/2009) and also in budget realization is also very guided by the annual program planning written in the budget book or called "livro orçamento 2-Plano Annual" in the 2018 fiscal year of the Ministry of Agriculture.

#### **D. Conclusions.**

The effectiveness ratio for 2018-2022 is generally effective with an absorption rate of 84.51% falling into the "effective" category, with the absorption rate for each year as follows: the 2019 budget absorption rate of 92.02% falls into the "effective" category, the 2019 budget absorption rate of 84.62% falls into the "quite effective" category, the 2020 budget absorption rate of 95.25% falls into the "effective" category, the 2021 budget absorption rate of 73.67% falls into the "less effective" category and the 2022 budget absorption rate of 77.02% falls into the "less effective" category.

#### **E. Recommendations**

Based on the findings and analysis concluded above, the following recommendations can be put forward to improve the effectiveness of the program-based budgeting system:

1. Maintain the effectiveness of budget execution trends by using a budgeting and budget execution system based on items.
2. To maintain the effectiveness of the program-based budget planning and execution system, every resource allocation within the program-based budgeting system must be results-oriented and linked to the ministry's structural outputs and strategic objectives.
3. It is hoped that future research will also examine the results of program-based budget implementation.

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